

## PHILADELPHIA NEUROLOGICAL SOCIETY.

The first stated meeting was held, Monday evening, February 25, 1884, the Vice President, Dr. CHARLES K. MILLS, in the chair. Dr. Mills read a paper on "The McGinnis Case." A history of the case, including an account of the crime and a discussion of the formation, proceedings, and reports of the commission to inquire into the mental state of McGinnis was given.

The facts indicating the insanity of McGinnis were summarized by Dr. Mills, in the course of his paper as follows: A bad family history; evidences of the monomaniacal character, as shown by a study of his life and present condition; the existence of a delusional state, and even of special delusions of a depressing and persecutory type; the presence of hallucinations of hearing and sight, the former being connected largely with persecutive ideas; some manifestations of religious monomania; a history of alcoholism, and the fact that his chief delusion, that of marital infidelity, was one often found in chronic alcoholic insanity.

The next paper was entitled: "Case of Unilateral Spasm, Hemiplegia, and Aphasia, following Measles in a Child Two Years and Four Months Old," by LAMBERT OTT, M.D., Assistant in the Nervous Department of the Post-Graduate Course of the Jefferson Medical College.

Boy, aged two years and four months, healthy and intelligent, talked well for one of his years. April 2d, he had a mild attack of mumps. Seven days later he was seized with premonitory symptoms which ushered in a well defined attack of measles. Other children in the same house were just convalescing from this exanthema. No physician was called, and nothing more was done than keeping him warm in bed and administering an occa-

sional purgative. On the tenth day after the beginning of the disease, the mother states that he felt well, was laughing and playing in bed, but instead of the dull yellowish stains which remain after the papules of measles have faded, his skin was dotted with spots of a purplish hue. The same morning the mother noticed a twitching of the muscles of the right eye and right side of face, and soon after similar movements of the right arm and leg. He remained conscious during the spasm, but was unable to speak, motioning for any thing he wanted. After the spasm had existed an hour, the leg ceased to move, and was found to be paralyzed. Half an hour later the arm-jerk stopped, and the limb lay powerless by its side; the face movements continued only a few minutes after the arm became quiet, when the side of the face was observed to be paralyzed. While the right-sided convulsive seizure was going on, the left arm and leg were affected with choreic movements, which subsided soon after right-sided paralysis was manifest. Two hours after the first appearance of the spasm, I noted the following condition: Ptosis of right eye; no change in pupils, and no disturbance in movements of eye-balls. When he cried the right side of the forehead remained smooth, while the left was markedly corrugated; no paralysis of tongue, but complete *aphasia*. I was unable to investigate the special senses on account of the age of the child. Motion in the right arm and leg was completely paralyzed, sensation partially. He was conscious, and drank water with very little difficulty. The left side of the body showed no disturbance of sensation or motion, excepting occasional choreic twitching. The dread the child had of strangers prevented me from examining the heart. Temperature, 101; pulse, 120; respiration, 20; and very irregular. Some bronchial catarrh.

Second day. Temperature, 102; pulse, 130; respiration, 40. Had no vomiting; intelligence remained good; tongue dry; passed water and feces involuntary. During the next six days his fever remained high, cough increased, and evidences of catarrhal pneumonia developed.

About the ninth day the mother called my attention to a bulging of the right side of the chest, resembling the deformity produced by a large pleuritic effusion, with a marked lateral curvature of the spine, the convexity being toward the right side; percussion of the lung of this side elicited hyper-resonance and auscultation, normal breathing with prolonged expiration. The chest deformity was apparently due to contraction of the muscles

of the left side. He had conjunctivitis of right eye and dribbling of saliva from the right-angle of the mouth. Was very irritable, and often carried his hand to his head and moaned. Urine examined and found normal. The choreic movements of left side returned, but was not as marked as at first.

In the second week the muscles of the face began to regain power.

In the third week there was no marked changes in his condition, except a peculiar swelling and tenseness of the paralyzed leg, which persisted four days, and suddenly disappeared during one night; the next morning the leg was very flabby. Electromuscular contractibility was fair. In the latter part of the third week his head was drawn to the paralyzed side, the chin pointing to the left, showing the peculiar influence of the healthy sternomastoid, and other neck muscles, which was pointed out to me by Dr. Eskridge. The muscles of the right side of the neck were flabby; those of the left side were hard and tense. Lifting the head would place it erect, but when unsupported, would fall into its former position. In the fourth week movements were noticed in the arm, and in the fifth week the leg began to regain power. He was now, for the first time, using a few monosyllables, as "ma," "pa," etc.

In the fourth month he walked fairly; used a few more words, especially the simpler ones.

In the sixth month of his disease, his general health was good, and he was talking more, but only using such familiar words as children learning to speak usually employ. His gait was fair and he was able to run, but there existed a marked weakness of the flexor and extensor muscles of the anterior part of the right leg and of the extensor muscles of the right arm.

I look upon the case as one of embolism of the left middle cerebral artery, obstructing the first branch, called the frontal-external and inferior, which supplies the third frontal convolution (convolution of Broca) wherein resides the centre of speech; also the second and third branches, called respectively the anterior parietal of Duret, or the artery of the ascending frontal convolution of Charcot, and the posterior parietal artery, or the artery of the ascending parietal convolution of Charcot. These two latter branches supply the motor centres of the extremities (Ferrier). The fourth branch, which supplies the angular gyrus, was proba-

bly not obstructed, as vision remained apparently unimpaired.

The motor centre of the facial muscles occupies a region in close proximity to those of the extremities, which is also supplied by branches of the middle cerebral artery.

There are some marked peculiarities in the case.

First. The age of the patient, two years and four months. Second. There was no loss of consciousness, which Hamilton says is the exception. In most cases there is either partial or complete loss of consciousness. Third. The disturbance of conformity of the chest, on the ninth day after the spasm. Fourth. The falling of the head to the paralyzed side twenty days after the spasm. Whenever he had a good night's rest, he was able to hold his head erect for two hours; after that time it lay to one side.

The order of recovery of the paralyzed parts was as follows: First, it is well to recall that the lower extremity lost power first, next the upper extremity, then the face, and later the neck and chest. In order of recovery, the face, neck and chest showed the first signs simultaneously, then the upper extremity, and next the lower extremity. When considerable power had been regained, quite noticeable yet was the weakness of the extensor muscles of the forearm, which gave the hand the peculiar position that resembles the wrist drop of lead palsy.

Most interesting of all was the occurrence of aphasia. Here was an active little boy, twenty-eight months old, who talked connectedly and as well as usual for one of his age, is suddenly stricken with unilateral spasm, followed by hemiplegia and total loss of the power of speech. His intelligence did not wane one whit during the whole trouble. When thirsty he protruded his tongue against the upper lip. If the parents told him the doctor was coming, he immediately manifested great fear, and beckoned for his mother to come near him.

If he wanted some article in a distant corner of the room, he pointed his finger at it and began to whine. When they put their hands on the wrong article, he intensified his whine, by which they understood it was not what he wanted. As soon as they touched the desired object, a smile came over his countenance.

In the fifth week he spoke his first words, as "pa," "ma," and "no." Later, other simple words were added to his vocabulary. The mother, a woman of experience, having had eight children, made a remark which struck me very forcibly, that it seemed as if he had to learn to talk over again. At no time did he misapply a word, as calling a "chair" a "table." When once he knew a word and its application, he always used it afterward. At this date (nine months after the attack) his speech is disconnected. If he desires to express a thought, he can make a good beginning, but is unable to finish. For instance; he wants to use the sentence, "Katie, get my hat in the other room!" he can only say, "Katie, get my hat ———," for the rest of the sentence he uses signs. His being unable to finish a sentence is not that he did not know the word "room," for when used otherwise, he had no trouble in recalling it. When he used three or four words in succession, his speech powers seemed at an end.

The discussion on Dr. Ott's paper was opened by Dr. Francis Dercum, who said he was inclined to regard the interesting case reported by Dr. Ott, as more likely to be one of hemorrhage than of embolism. It is well known that the miliary aneurism described by Charcot and others, occur sometimes in the very young, therefore, one of the conditions which leads to hemorrhage may be present in infancy. The absence of valvular disease of the heart was also against the idea of embolism.

Dr. Dercum thought that the symptoms presented by the case indicated a lesion of the internal capsule and basal ganglia, rather than of the convolutions. He referred to the more frequent occurrence of hemorrhage in this region, and also of the wide extent of cortex that would have been required to be involved in order to explain the phenomena.

Dr. CHARLES K. MILLS agreed with Dr. Dercum that, from the history of the case, the absence of recognized heart lesions, and the age of the patient, the case was probably one of hemorrhage. He believed, however, that some of the facts indicated a cortical lesion. One of these was the existence of choreic movements on the side opposite that which was paralyzed.

According to Duret, when irritative lesions of the cortex occur, they produce not only spasm on the opposite side of the body, but also may cause contraction or spasm on the same side, the result being brought about through irritation of the sensory nerves of the dura mater, which irritation is conveyed to the bulbo-medullary centres.

Dr. MILLS referred to the completeness of the paralysis, as a matter of great interest in connection with the views of Brodbent as to the communication by well-worn commissural channels of those parts of the central nervous system which preside over movements of the two sides of the body which are associated.

Dr. JAMES HENDRIE LLOYD referred to the remarks which Dr. Ott had made about the angular gyrus not having been involved, and said he was not aware that any well reported cases of embolism affecting the angular gyrus and causing blindness had been published.

Dr. DERCUM said that the occurrence of choreic movement on the side of the lesion could be as well explained by the transmission of irritation by means of the commissural channels of the brain, as by the views of Duret.

Dr. OTT closed the discussion, and said in favor of embolism is the sudden appearance of the attack, and an array of symptoms which usually follow an embolus in the left middle cerebral artery. In favor of cerebral hemorrhage is the disorganized condition of the blood as a resultant of measles, predisposing to such an occurrence.

On the conclusion of the discussion of Dr. Ott's paper, Dr. Charles K. Mills read a "Note on the use of nerve-pressure for the relief of hysterical contracture."

In three cases Dr. Mills had resorted to strong pressure, applied, by means of the thumb or fingers, to the trunk of the nerve supplying the muscles affected by the spasm in contracture; in a case of hysterical spasmodic torticollis, and in one of hysterical contracture of the wrist and hand, the condition passed away, and remained relieved; in a case of long standing contracture at the knees under the effects of pressure on the sciatics the spasm disappeared but recurred. The procedure was simple, and had value, both as a means of diagnosis and treatment. Whether the

effect was produced by mental effect, by causing a temporary paresis, or by the pain, he was not prepared to say.

Dr. WHARTON SINKLER spoke of having used the method unsuccessfully in a case of facial spasm, which was not, however, hysterical in character.

A stated meeting of the Society was held Monday evening, March 24, the President, Dr. S. WEIR MITCHELL, in the chair. Dr. Mitchell made some introductory remarks as follows, on "The Objects and Duties of a Neurological Society": I learned but four days ago that I must meet you to-night, for the first time, as your presiding officer. I thank you for the selection, with feelings which are not altogether made up of pure gratitude.

The time will come, I hope, to all of you when you will be so weighted with professional cares that the prospect of even an agreeable duty will appear to you as this one does to-night to me; for while it must be a pleasure to preside over a set of thoughtful men, united by the bonds of a common sympathy, the fact that this involves new duties is one from which I cannot escape. I shall begin by saying that this year especially I shall be absent often and for long periods from your meetings, and I have so stated before consenting to serve with and for you.

My own view of the duties of a president involves much more than merely to preside at meetings. He may do much by exciting and guiding debate, by arranging to secure papers, and by urging and, in a measure, influencing research.

He also has certain duties as a critic, and as critical duties are most pleasantly fulfilled when there is as yet nothing to criticise, I shall begin mine by saying briefly what I think this Society ought to be, what its individual members should seek to become, and what they ought to avoid being.

This brings up a question as to why medical men organize societies or join them. When there were no journals these meetings had an obvious purpose in the needful relations they established. They were to knowledge what the old exchanges were as regarded commerce. But now we have every new thing thrust at us in weeklies which we

scarce find time to skim. What, then, is the need for societies? Except, as in the case of our College of Physicians, they cannot sustain libraries, or act on public opinion, or nourish pleasant fellowship. If they have a real reason for existence, it is in the fact that they bring together in groups men having common interests, so that these men stimulate one another by example and criticism, and by the sympathy arising out of unity of pursuit.

It is never very well to be absolutely isolated in your pursuits. I, myself, can well recall how little interest I found in this city in physiology when I first began to work at it practically. It was a real and serious discouragement. The reverse of this condition of intellectual loneliness has its use. All men do more and better work amidst the competitions of other workers. Some men can do no work unstirred by the ferment of companionship in like efforts.

In these subtle agencies lie the value of associations like ours—in the examples they offer, the discipline they teach, the criticism they afford, the sympathy they evolve. The advantage of small societies is that they secure definiteness of aim, and that we hear only what interests all who are present.

The danger of such bodies is that of narrowness, and is the risk to which all persons pursuing specialties are themselves liable. It is to be avoided by not limiting your thoughts to what you discuss in this hall, and by keeping up that sympathetic wide-awakefulness which should preserve for you an interest, and a watchful one, concerning the work done in all other lines of professional progress. Neurologists are least of all liable to fail in this direction; their special study is too broad, and their exposure to this form of degeneration only comparative. It is the small specialties which suffer most, and for that reason I would allow no one to practice otology or ophthalmology alone who had not had ten years of general practice. Nearly every one in such a society as this should be capable of entering debate with something worth contributing; whilst in large collections of men a few members only debate a subject, and it may chance to have no relation to the active, practical life of the mass of those present. We shall hope,



then, to see here enough of debate, unsparing yet courteous criticism, a desire to talk only when there is something to say, and a highly cultivated tendency to sit down when that thing has been said. The habit of repetition, of unthoughtful comment and unfruitful criticism, shall have no place here.

Let me say a word as to papers. No doubt we shall, in our existence as a society, hear some papers which, to use an Irish phrase, would have been more interesting if they had never come into being. As to these future, and, therefore, defenceless victims, of unjust attack, a word in advance. When a man presents an essay here or elsewhere he should remember that, for a time, he has a group of people at his mercy, tied to the stake of patience by the bonds of social courtesies. It is his duty to have something to say, and then to say it as briefly as possible. There is no literary praise for one ought to value like that of condensation. When it is not possible to make brief reports as to cases, it is advisable, for society purposes, to cut them short by reasonable omissions.

Single cases, or those with clinical personal illustrations, are more desirable here than in larger societies, but I am apt to think little of the future of young men who are in the habit of reporting single cases. Let us have these only when they possess real value, or are unusual enough to evoke fresh thought and discussion. The patience which selects a subject and for years works at it, waiting for cases, and maturely considering them, seems to be rare in this country, despite of the sure rewards which await its labor. Let us hope to welcome here many such contributions.

Especially may I hope to see and hear much of therapeutics. In the numberless queries for debate at the International Medical Association at Copenhagen I saw not one therapeutic question, and there is a strong feeling in America that in England and this country therapeutics are more sincerely studied and more constantly kept in view by the best physicians than in Germany and France. This is possibly true, and may be owing to the growth of doubt engendered by the certainties of purely scientific work in regard to the insecurity of therapeutic decisions. It is too

true that direct therapeutics often owe little to the great masters in neural research; but it is not always true, and from some of the most scientific the art of healing has gained directly, as well as indirectly, through improvements in diagnosis, much that is of priceless value.

Here we must never cease to remember that our ultimate object is to relieve from pain and disability, and to save from death. Let us, therefore, keep constantly in view this matter of therapeutics. Let us see all new instruments, consider new drugs, receive hints from our laboratories, and perhaps have deliberate debates or conferences given over to some single agent, or to the treatment of some one disease, with the sharpest criticism upon supposed results.

As an example, I would like well to learn whether all of you accept the present views of the value of strychnia and the theory of its action, and to hear your evidence thereon.

Not less would I like such a conference with some surgeons added on the value of ovariectomy as a therapeutic measure in insanity. I mention these as illustrations; but your ideas as to exclusive diets in nervous maladies would be as interesting.

Regarding you as a set of men grouped for a certain kind of work, something more may be said.

You ought to appoint committees now and then to collect material and suggest work, or to deal with certain questions, such as the best means of determining the amount of sensation present in a part. As to this, there are, except Weber's plan, which fails of value save for slight cases, no generally adopted and trustworthy methods. In the same direction there is good work to be done by collective labor in determining, through the effect of nerve sections, the true distribution of nerves to the skin. I might easily multiply such questions; and some of them would have a peculiar value relative to climate and seasons in America; and of these would be the relation of rheumatism to chorea, and the statistics of cerebral apoplexy relative to temperature.

It does not seem to me that it will be ever wise to attempt separate publication of proceedings. If there be any surplus of money it may go toward aiding laboratory work, or

to completing for our college library its very imperfect collection of books on neural maladies.

With these hints and with my renewed thanks, I enter with you upon your society life, in the hope that it may be long, vigorous, and interesting.

Dr. Sinkler presented a patient suffering from spinal accessory spasm, and read the following history of the case :

Anna B. K., aged forty-one years, single. Has never enjoyed very good health, but has had no special illness. She has had neuralgic headaches for several years, and about three years ago had rheumatism in the left shoulder. In the spring of 1882 she noticed that, while sitting sewing, her head would turn toward the right shoulder. She could control the movement at first, if she directed her attention to it, but it soon began to be worse, and less under the influence of the will. In June or July, 1882, she became unable to restrain the movements of her head. There was no pain in the neck or head, but she became nervous and irritable. There was a sense of discomfort on the top of her head. The use of her eyes seemed to make the movements more troublesome. Her general health had been fairly good ; the appetite poor, and she has worried greatly. She was under Dr. Sinkler's care, at the Infirmary for Nervous Diseases, for several weeks in the spring of 1883, and various remedies were used. Galvanism and static electricity were faithfully applied, as well as massage. Hypodermics of atropia were given in the muscle affected, and the bromides and gelsemium were administered. There was no benefit apparent from the treatment.

The patient was re-admitted to the Hospital a few days ago, and her present condition is as follows : She is thin and of spare build. She usually sits resting the right side of the face against her hand to check the movements. The head is rotated to the right every few seconds, and turns more frequently if she is excited or nervous. The chin is turned strongly to the right and the head inclined slightly in the same direction. The head is not drawn back. After being held in this position for about two seconds the spasm relaxes and the head becomes straight. She can keep the head quiet by resting it against some object, and sometimes will rest her head against the wall, for this purpose. The left sterno-cleido mastoid muscle is markedly hypertrophied and is tender to handle. Pressure over the spinal accessory nerve does not arrest the spasm ; it rather brings it on. There is pain

at the insertion of the right sterno-mastoid muscle, but none in the left muscle. No contraction takes place in the trapezius muscle and it is not hypertrophied. The voice is unchanged and there is no laryngeal spasm.

The urine contains neither albumen nor sugar.

Dr. HARLAN, one of the surgeons at Wills Eye Hospital, kindly examined the patient's eyes, and reported that optic discs were nearly or quite normal. Vision R.  $\frac{20}{30}$ , L.  $\frac{20}{40}$ .

The patient is nervous and inclined to be hysterical.

Dr. DERCUM mentioned a case which was relieved by nitrite of amyl. He said, however, that the case was specific in nature. Iodide of potassium was afterward given, with satisfactory results.

Dr. MITCHELL believed that gelsemium, in exceedingly large doses, was the best remedy for such cases.

Dr. A. J. PARKER made some remarks on *the primitive fissures of the foetal brain*. These fissures appear very early in foetal life. He did not believe, with some, that they were due to hardening agents, as alcohol and chloride of zinc. He found that these fissures had certain mathematical relations to the brain itself. He regarded them as due to pressure, just as brain flexure is due to pressure. The brain grows under pressure; it tends to grow more rapidly than the skull. Fissures represent retarded growth.

The PRESIDENT invited Dr. Guy Hinsdale to exhibit to the Society some mounted specimens showing the lesions of snake venom.

The specimens were obtained in the experimental laboratory of Drs. Mitchell and Reichert, in the University of Pennsylvania, and illustrated the ecchymoses seen in the lungs of rabbits into whose jugular veins venom had been injected. The appearances are striking, the blotches of extravasation being in marked contrast with the surrounding lung tissue. The colors have been preserved by filling the large cells with a fluid composed as follows:

Glycerine . . . . .	Oss.
Dense sol'n gum-arabic . . . . .	Oj.
Sat'd sol'n acetate of potash . . . . .	Oiss.

The cells are made by cementing to a square piece of plate-glass a rubber ring, five inches high and five broad, covering the cell, when filled with the fluid, with a round cover-glass. These cells are four inches in diameter. The cement used is known as "Van Stan's Stratena," and, being made with acetic acid, is not affected by the fluid of the cell. Before the rubber ring is fastened to the glass a triangular cork is cut in it at two places, so that if the fluid becomes discolored, as in mounting specimens too quickly, the original fluid may be drained away and fresh fluid supplied. Large hypodermic needles and a syringe are of use in this operation. Air-bubbles may also be removed in this way. The specimens exhibited have been mounted for only one month, but they are apparently as fresh as ever.

The eight specimens exhibited the lesions of pure venom of the rattlesnake, the lesions of the three globulins, and the peptone which compose the poison.